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WILSON  
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patent attorneys

January 16, 2004

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"Express Mail" mailing number.: EV 412 494 220 US

Date of Deposit January 16, 2004

I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*Gayle W. Chaney*  
Gayle W. Chaney

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Re: U.S. Patent Application for  
SYSTEMS AND METHODS FOR PRODUCING SINGLE-  
WALLED CARBON NANOTUBES (SWNTS) ON A  
SUBSTRATE  
Our Ref. No. 180/167/2

Sir:

Please find enclosed the following:

1. Utility Patent Application Transmittal Form (Form PTO/SB/05, 2 pages);
2. Fee Transmittal Form (Form PTO/SB/17, 1 page) in duplicate;
3. A U.S. patent application for SYSTEMS AND METHODS FOR PRODUCING SINGLE-WALLED CARBON NANOTUBES (SWNTS) ON A SUBSTRATE (43 pages);
4. Twenty-Four (24) sheets of formal drawings;
5. Unexecuted Declaration (3 pages);
6. Information Disclosure Statement (2 pages);
7. Form 1449 (1 page) in duplicate;

tel 919.493.8000  
fax 919.419.0383

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JenkinsWilsonTaylor.com

University Tower, Suite 1400 | 3100 Tower Boulevard | Durham, North Carolina 27707

17548 U.S. PTO  
10/759592



Commissioner for Patents  
January 16, 2004  
Page 2

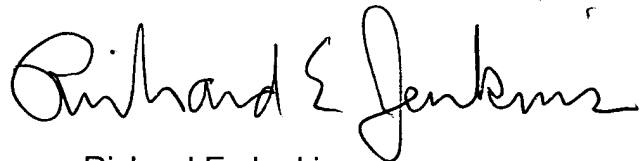
8. Copies of cited references (3 references);
9. A return-receipt postcard to be returned to our offices with the U.S. Patent and Trademark Office date stamp thereon; and
10. A Certificate of Express Mail No.: EV 412 494 220 US.

Please contact our offices if there are any questions.

The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account Number 50-0426.

Respectfully submitted,

JENKINS, WILSON & TAYLOR, P.A.

A handwritten signature in black ink, appearing to read "Richard E. Jenkins". The signature is fluid and cursive, with the first name "Richard" being more prominent.

Richard E. Jenkins  
Registration No. 28,428

REJ/BJO/gwc

Enclosures

Customer No.: 25297

180/167/2

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY  
PATENT APPLICATION  
TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

|                        |                   |
|------------------------|-------------------|
| Attorney Docket No.    | 180/167/2         |
| First Inventor         | Jie Liu           |
| Title                  | See 1 in Addendum |
| Express Mail Label No. | EV 412 494 220 US |

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

## ADDRESS TO:

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 43]  
(preferred arrangement set forth below)
- Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 24]
5. Oath or Declaration [Total Sheets 3]
- a. ☐ Newly executed (original or copy)
- b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)
- i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
- ii. ☐ Paper
- c. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☒ Information Disclosure ☒ Copies of IDS  
Statement (IDS)/PTO-1499 Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☐ Other: .....

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: .....

Prior application information:

Examiner: .....

Art Unit: .....

For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

☒ Customer Number: 25297 OR ☐ Correspondence address below

Name

Address

City

State

Zip Code

Country

Telephone

Fax

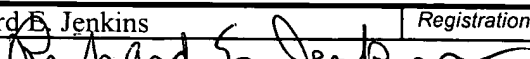
Name (Print/Type)

Richard B. Jenkins

Registration No. (Attorney/Agent)

28,428

Signature



Date

11-16-04

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

## Addendum

1. SYSTEMS AND METHODS FOR PRODUCING SINGLE-WALLED CARBON NANOTUBES (SWNTS) ON A SUBSTRATE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 989.00

## Complete if Known

|                      |                |
|----------------------|----------------|
| Application Number   | To Be Assigned |
| Filing Date          | Herewith       |
| First Named Inventor | Jie Liu        |
| Examiner Name        | To Be Assigned |
| Art Unit             |                |
| Attorney Docket No.  | 180/167/2      |

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit  
Account  
Number  
Deposit  
Account  
Name

50-0426

Jenkins, Wilson & Taylor, P.A.

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments  
☐ Charge any additional fee(s) during the pendency of this application  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

| Large Entity<br>Fee Code (\$) | Small Entity<br>Fee Code (\$) | Fee Description        | Fee Paid   |
|-------------------------------|-------------------------------|------------------------|------------|
| 1001 750                      | 2001 375                      | Utility filing fee     | 385.00     |
| 1002 330                      | 2002 165                      | Design filing fee      |            |
| 1003 520                      | 2003 260                      | Plant filing fee       |            |
| 1004 750                      | 2004 375                      | Reissue filing fee     |            |
| 1005 160                      | 2005 80                       | Provisional filing fee |            |
| SUBTOTAL (1)                  |                               |                        | (\$ 385.00 |

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims 68 -20\*\* = 48 x 9 = 432  
Independent Claims 7 -3\*\* = 4 x 43 = 172  
Multiple Dependent ☐ = ☐

| Large Entity<br>Fee Code (\$) | Small Entity<br>Fee Code (\$) | Fee Description  |
|-------------------------------|-------------------------------|--|
| 1202 18                       | 2202 9                        | Claims in excess of 20                                     |
| 1201 84                       | 2201 42                       | Independent claims in excess of 3                          |
| 1203 280                      | 2203 140                      | Multiple dependent claim, if not paid                      |
| 1204 84                       | 2204 42                       | ** Reissue independent claims over original patent         |
| 1205 18                       | 2205 9                        | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$ 604.00

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES


| Large Entity<br>Fee Code (\$) | Small Entity<br>Fee Code (\$) | Fee Description  | Fee Paid |
|-------------------------------|-------------------------------|--|----------|
| 1051 130                      | 2051 65                       | Surcharge - late filing fee or oath  |          |
| 1052 50                       | 2052 25                       | Surcharge - late provisional filing fee or cover sheet                     |          |
| 1053 130                      | 1053 130                      | Non-English specification  |          |
| 1812 2,520                    | 1812 2,520                    | For filing a request for ex parte reexamination                            |          |
| 1804 920*                     | 1804 920*                     | Requesting publication of SIR prior to Examiner action                     |          |
| 1805 1,840*                   | 1805 1,840*                   | Requesting publication of SIR after Examiner action                        |          |
| 1251 110                      | 2251 55                       | Extension for reply within first month                                     |          |
| 1252 410                      | 2252 205                      | Extension for reply within second month                                    |          |
| 1253 930                      | 2253 465                      | Extension for reply within third month                                     |          |
| 1254 1,450                    | 2254 725                      | Extension for reply within fourth month                                    |          |
| 1255 1,970                    | 2255 985                      | Extension for reply within fifth month                                     |          |
| 1401 320                      | 2401 160                      | Notice of Appeal   |          |
| 1402 320                      | 2402 160                      | Filing brief in support of an appeal                                       |          |
| 1403 280                      | 2403 140                      | Request for oral hearing   |          |
| 1451 1,510                    | 1451 1,510                    | Petition to institute a public use proceeding                              |          |
| 1452 110                      | 2452 55                       | Petition to revive - unavoidable   |          |
| 1453 1,300                    | 2453 650                      | Petition to revive - unintentional   |          |
| 1501 1,300                    | 2501 650                      | Utility issue fee (or reissue)   |          |
| 1502 470                      | 2502 235                      | Design issue fee   |          |
| 1503 630                      | 2503 315                      | Plant issue fee  |          |
| 1460 130                      | 1460 130                      | Petitions to the Commissioner  |          |
| 1807 50                       | 1807 50                       | Processing fee under 37 CFR 1.17(q)  |          |
| 1806 180                      | 1806 180                      | Submission of Information Disclosure Stmt                                  |          |
| 8021 40                       | 8021 40                       | Recording each patent assignment per property (times number of properties) |          |
| 1809 750                      | 2809 375                      | Filing a submission after final rejection (37 CFR 1.129(a))                |          |
| 1810 750                      | 2810 375                      | For each additional invention to be examined (37 CFR 1.129(b))             |          |
| 1801 750                      | 2801 375                      | Request for Continued Examination (RCE)                                    |          |
| 1802 900                      | 1802 900                      | Request for expedited examination of a design application                  |          |

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 0.00

## SUBMITTED BY

|                   |   |                                   |         |           |              |
|-------------------|---|-----------------------------------|---------|-----------|--------------|
| Name (Print/Type) | Richard E. Jenkins  | Registration No. (Attorney/Agent) | 28,428  | Telephone | 919-493-8000 |
| Signature         |  | Date                              | 1-16-04 |           |              |

(Complete if applicable)

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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